UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,304	12/20/2001	Andreas Jagtoyen	03438.0082	8395

7590 04/09/2004

Finnegan Henderson Farabow Garrett & Dunner
1300 I Street NW
Washington, DC 20005-3315

EXAMINER	
VERBITSKY, GAIL KAPLAN	
ART UNIT	**PAPER NUMBER**
2859	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/937,304	JAGTOYEN, ANDREAS	
	Examiner	Art Unit	
	Gail Verbitsky	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 15* is/are rejected.

7)☒ Claim(s) *5-14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et al. (U.S. 5438322) [hereinafter Martin] in view of Prior Art (WO 9709596) admitted by applicant in pages 2-3 of the specification [hereinafter WO].

Martin discloses a device to determine temperature. Martin teaches to encapsulate a wireless temperature-sensing element in a housing/ bolt to be screwed in a mounting hole of a moving part/ body (bearing of a moving railroad car). The bolt is filled internally with a material acting as a compression material (spring) and a diaphragm (flexible, stretchable heat resistant material), which keeps the temperature-sensing element in a required position. As shown in Fig. 1, the element is arranged in a lower end of the mounting hole. Martin also teaches an antenna protruding through the bolt, as shown in Fig. 3. The device sends a signal to a receiving unit/ control unit (col. 2, line 36).

Martin does not teach that the temperature-sensing element is an encapsulated SAW element.

WO discloses a device to determine temperature of a moving/ rotating part, the device comprising a temperature sensor formed/ comprising as SAW chip having

transmitting functions (temperature dependent transfer function). WO teaches that a temperature corresponding acoustic signal is transmitted by radio (transmission line) to remote point (antenna) located outside of the sensor's position.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the temperature sensing element disclosed by martin, with the temperature sensing element comprising SAW, as taught by WO, because both of them are alternate types of temperature sensing/ detecting elements for sensing the temperature of a moving part and transmitting a signal to an antenna, if one is replaced with the other.

With respect to the preamble of claims 1-3: the preamble of the claims does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and a portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

With respect to "whereby"/"thereby", as stated in claim 1: it has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin and WO as applied to claims 1-3 above, and further in view of Waters et al. (U.S. 5070706A) [hereinafter Waters].

Martin and WO disclose the device as stated above in paragraph 2.

They do not explicitly teach that the heat resistant material is an epoxy material.

Walters teaches a heat resistant epoxy material to retain a structure in place.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Martin and WO, so as to make the heat resistant material an epoxy material, as taught by Walters, because both of them are alternate types of heat resistant material which will perform the same function, of retaining the structure in place in a hot environment, if one is replaced with the other.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of WO and Schurmann (U.S. 5513525).

Martin discloses the device as stated above in paragraph 2.

Martin does not teach a SAW comprising temperature-sensing element, with the remaining limitations of claim 15. Martin does not teach a second antenna arranged to transmit and receive signals from the first antenna. Martin does not teach to connect the second antenna by a cable to a control unit.

WO teaches a device to determine a temperature of a moving part, the device comprises a SAW comprising temperature-sensing element. WO teaches a temperature transmitting function (temperature dependent transfer function). WO teaches that the temperature corresponding acoustic signal is transmitted by radio (transmission line) to a remote point (antenna) located outside. A polling signal in the form of a radio signal with a specified property transmitted from a polling unit and received by the SAW element, converted into an electrical signal, then in an acoustic signal, reflected from a

surface, converted back into the electrical signal (modified), and returned to the polling unit (control unit).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the temperature sensing element disclosed by Martin, with the temperature sensing element comprising SAW, as taught by WO, because both of them are alternate types of temperature sensing/ detecting elements which will sense/ determine the temperature of a moving part and transmitting a signal to an antenna, if one is replaced with the other.

Schurmann discloses a device in the filed of applicant's endeavor comprising a sensor installed/ encapsulated in a moving part (wheel), a first antenna (transponder) 44 and 48 coupling to a second antenna/ receiver connected to an evaluating (control) electronics via a wire line (cable) 34.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Martin, so as to add a second antenna/ receiver connected to the control unit by a cable, as taught by Schurmann, n order to transmit a temperature related signal directly to an operator, in order to enable the operator to take necessary action when needed.

Allowable Subject Matter

5. Claims 5-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4, 15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant states that martin does not measure temperature but alarms when threshold has been reached. This argument is not persuasive because, A) in order to initiate the alarm, Martin should detect the temperature. B) Also, this argument is not persuasive because the limitation upon which applicant relies on, i.e., measuring temperature, has not been positively stated in the claims. It is the claims that define the claimed invention, and it is claims, not specification that are anticipated or unpatentable. Constant v. Advanced Micro-Devices, Inc., 7 USPQ2d 1064.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky
Primary Patent Examiner, TC 2800

March 31, 2004